

REMARKS

Reconsideration and allowance of this application are respectfully requested in light of the above amendments and the following remarks.

At the outset, the Applicants would like to thank the Examiners for the courtesy shown to their representative during a personal interview on August 27, 2009. The participants were Examiner Di Prisco, SPE Perez-Gutierrez, and the undersigned. The primary claims discussed were claims 26 and 32. The art discussed was 3GPP TS 25.309 v6.2.0, Mueckenheim et al. (US 2006/0215604), and 3GPP TSG-RAN WG2 #46. General language was discussed that the Examiners' agreed would in principle render the claims allowable. A summary of the substance of the interview is included in the comments below.

Claims 36, 44 and 46-49 are now canceled. New claims 50-52 have been added to round out the scope of protection for this invention; these new claims depend from claims 26, 38 and 45, respectively, and recite subject matter similar to criteria (a)-(c) of claim 32.

Claims 26-35 and 38-43, and 45 stand rejected, under 35 USC §102(a), as being anticipated by 3GPP TS 25.309 v6.2.0 (hereinafter 3GPP '309) in view of Mueckenheim et al. (US 2006/0215604). Claim 37 stands rejected, under 35 USC §103(a), as being unpatentable over 3GPP '309 in view of Mueckenheim et al. (US 2006/0215604) and 3GPP TSG-RAN WG2 #46 (hereinafter 3GPP WG2). The Applicants respectfully traverse these rejections based on the points set forth below.

The Applicants submit that Mueckenheim adds nothing to the teachings of 3GPP '309 of any relevance to the present claimed subject matter. In particular, the happy bit is set in both 3GPP '309 and Mueckenheim if two criteria are met:

(1) the UE has power to send at higher data rates (i.e., this is based on the "power headroom" criterion which indicates how much power the UE could use for transmissions on the E-DCH without exceeding its capabilities and relative to the transmission power required for the transmission on the dedicated channels (DCHs), i.e., power headroom for use for transmissions on E-DCH = (maximum power the UE is capable of using) - (power required for the dedicated channels)), and

(2) the total amount of data in the transmit buffer would require a greater number of TTIs than currently allotted by the scheduling grant; that is, the happy bit according to the definitions of 3GPP '309 and Mueckenheim expresses, "whether the UE is satisfied with the current parameters (e.g. the maximum ETFC [that is the maximum data rate]) provided by a previous absolute grant or relative grant."

The teaching of 3GPP '309 and Mueckenheim is not what the criterion of claim 26, or respectively criterion (c) of claim 32, expresses. To the contrary, the present claimed invention adds a criterion that is related to the (current) utilization of the allocated maximum data rate. Only if the maximum allocated data rate is utilized by the UE, may the UE indicate an "unhappy" status, i.e., request to increase the uplink data rate/resources. Claim 32 states this as "setting the happy bit ... if all of the following criteria are met: a)..., b)..., and ... c) the user equipment is utilizing the maximum uplink resources set by scheduling grants for scheduled uplink data transmission."

In sum, 3GPP '309 and Mueckenheim do not state that the UE is using the maximum UL resources set by scheduling grants but rather merely that the total amount of data in the transmit buffer would require a greater number of TTIs than currently allotted by the scheduling grant(s). Thus, page 3, lines 19-22, of the Office Action is incorrect in stating that Section 9.3.1.2 of 3GPP

'309 discloses that the happy bit is not set if the UE transmits UL data via the E-DCH without using the amount of UL resources for scheduled UL data as allowed by scheduling grants. The cited portion of 3GPP '309 does not disclose or suggest any such thing because Section 9.3.1.2 merely states that the UE sets the happy bit if (1) it has power available for sending data at higher data rates and (2) its total buffer status would require more than X TTIs with the Current Grants.

During the interview, the undersigned presented arguments focused precisely on the claim language and what exact subject matter in claims 26 and 32 the applied references fail to expressly and impliedly disclose.

It was pointed out to the examiners that both 3GPP '309 and Mueckenheim provide that the happy bit shall be set if two criteria are met:

- (1) the UE has power to send at higher data rates, and
- (2) the total amount of data in the transmit buffer would require a greater number of TTIs than currently allotted by the scheduling grant.

It was pointed out that 3GPP '309 and Mueckenheim do not expressly state or imply a third condition (3) (as in instant claim 26, for example) that the happy bit is not set unless the UE is using the maximum UL resources set by scheduling grants, but rather the references state merely that the happy bit shall be set if above conditions (1) and (2) exist.

It was further pointed out that in 3GPP '309 and Mueckenheim, the happy bit shall be set if conditions (1) and (2) exist, whereas the Applicants' claim 26 states that the happy bit indicates that condition (1) exists, but does not state that the happy bit shall be set if condition (1) exists. In other words, condition (1) can exist without the happy bit being set. Dependent claim 32 could be viewed as setting the conditions (1), (2) and (3) to define when the happy bit shall be set.

Moreover, it was pointed out that condition (3) of instant claims 26 and 32 would negate the requirement in 3GPP '309 and Mueckenheim that the happy bit shall be set if conditions (1) and (2) exist. This is because condition (3) would not permit the happy bit to be set unless the UE is using the maximum resources under the scheduling grant.

The Examiners expressed concern about the meaning of "scheduling grants" in claim 26. In particular, the Examiners wanted to know if this language distinguished between absolute grant and relative grant. The undersigned pointed out that this is not relevant because 3GPP '309 and Mueckenheim do not provide that the happy bit shall not be set based on any condition relating to whether the UE is utilizing maximum granted resources under either a relative grant or an absolute grant. Nevertheless, the Examiners indicated that they would not allow present claim 26 without some amendments to distinguish between serving grant and maximum serving grant as discussed in paragraphs [0153] and [0154] of the instant published application. The undersigned replied that, for the reasons given above, no amendment of independent claim 26, or independent claims 38 or 45, is needed in order to distinguish over 3GPP '309 and Mueckenheim.

Accordingly, the Applicants respectfully submit that even if the teachings of 3GPP TS 25.309 v6.2.0, Mueckenheim et al. (US 2006/0215604), and 3GPP TSG-RAN WG2 #46 were combined as proposed in the Office Action, the result still would not achieve the subject matter defined by claim 26, and thus would not render obvious this subject matter. Independent claims 38 and 45 similarly recite the above-mentioned subject matter distinguishing method claim 26 from the applied references, but claim 38 does so with respect to an apparatus and claim 45 does so with respect to a computer readable medium. Therefore, allowance of claims 26, 38, and 45 and all claims dependent therefrom is deemed to be warranted.

In view of the above, it is submitted that this application is in condition for allowance, and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,

/James Edward Ledbetter/

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JEL/DWW/att

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